



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

drawing weeping-willow leaves into the earth. Most of them were drawn into the earth by the petioles, which being the easiest way, is referred to by Mr. Darwin in his work on the earthworm, as exhibiting intelligence in these humble creatures.

Mr. MEEHAN remarked that, though he had seen in England leaves drawn into the earth as described by Mr. Darwin, he had never seen a case in America, until those exhibited by Mr. Potts, though for many years he had had opportunities of observations enjoyed by few. The apparent rarity of this work of the earthworm in this country was worthy of consideration in connection with the objects of the creature in performing it.

Mr. POTTS stated that the ground beneath a willow tree in his garden was unusually well stocked with earthworms, many of them of large size. The damp weather of the last week or two had brought them to the surface at a time when the willow leaves, still green and succulent, were rapidly falling. These the worms collected during the night, drawing them down into their burrows, he thought, to an average depth of one inch per day or night.

The appearance of the neighborhood by daylight was very curious. Throughout the garden-beds, the grass-plot, the gravel-walk and even along the cracks of the brick pavement, wherever their burrows had reached the surface, the busy tenants had "planted" these leaves perpendicularly, sometimes singly, frequently in tufts of six, eight or more, giving the appearance of a child's play-garden or of the slip-boxes in a gardener's greenhouse.

On digging up the tufts, worms were generally found with an extremity near the base of the leaves; and here the latter seemed moistened and frayed as by a process of feeding. The phenomenon was not entirely novel, but he had never noticed these "worm-plantings" in such numbers before.

---

NOVEMBER 21.

The President, Dr. LEIDY, in the chair.

Thirty-two persons present.

*Remarks on Ursus amplidens.*—Mr. JACOB WORTMAN called attention to a specimen originally described by Dr. Leidy in the Proceedings of the Academy of Natural Sciences, Philadelphia, for the year 1853, and republished and figured in the Journal of the Academy for the year 1856, under the name *Ursus amplidens*, from near Natchez, Mississippi.

The specimen upon which the description of the species was based, consists of the posterior portion of the left mandibular ramus, containing the third or last true molar tooth in position,

also a first true molar of the upper series, belonging to the left side of the jaw.

That this specimen is distinct from our black bear or *Ursus americanus*, there can be no doubt. Both the size and structure of the teeth distinctly forbid its reference to this species. The only differences, however, that he had been able to find between it and the typical grizzly bear, or *Ursus ferox*, consist in its smaller dimensions, and a slight exaggeration of the anterior basal lobe of the first true molar.

The geographical position of this specimen, together with this slight variation of structure, appear to have been important factors in establishing its claim to rank as a new and a distinct species.

With reference to the geographical position it may be said that there are many familiar examples of the various species of bears, enjoying a much wider geographical distribution than the existing grizzly bear or *Ursus ferox*. The black bear or *Ursus americanus* is well known to inhabit the extreme eastern and western portions of the North American continent, and ranges well to the north and the south. The polar bear or *Ursus maritimus*, inhabits almost, if not quite, the entire polar circle; and, indeed, Mr. G. Busk has in the Transactions Philos. Soc. of London, 1873, and later in Trans. Zoolog. Soc. London, for the year 1877, established the identity of *Ursus fossilis* of Goldfuss or *Ursus priscus*, Cuvier and Owen, with our existing grizzly bear or *Ursus ferox*.

In view of the fact, therefore, that the grizzly bear is now known to have inhabited Europe during Post Pliocene time, thereby greatly extending the boundaries of its present limits, little importance need be attached to a comparatively slight deviation from its present geographical range.

There is, probably, no family among the mammalia which is subject to greater variation, in size and structure, than the *Ursidæ*. The grizzly bears inhabiting the mountains of California and Oregon, are larger and more robust than those living upon the eastern slope of the Rocky Mountains. So far, indeed, is this true, that some authors have made two distinct species of them. The bear of the Rocky Mountain region is familiarly known to hunters as the "silver-tip bear," and is said to display even more pugnacity of character than the true California grizzly.

The small size of the individual under consideration is in keeping with what we should reasonably expect to find at a point considerably to the east of the present boundary of the range of this species.

The measurements of the crown of the last lower molar, are as follows: Antero-posterior diameter, 75 inch; transverse diameter, .60 inch. The crown of the first upper molar measures in the antero-posterior diameter .82 inch, while in the transverse diameter it is .64 inch.

The average dimensions of the corresponding tooth of *Ursus*

*ferox*, as given by Mr. Busk in Trans. Philos. Soc, 1873, p. 542, are .92 by .62 inch in the transverse, with a minimum dimension of .85 by .55 inch.

The experience of the speaker upon examination of quite a number of skulls of this species, had been to reduce the minimum dimension, recorded by Mr. Busk, which would affect the general average.

In one young but well marked specimen of *Ursus ferox*, in the collection of the Academy, the dimensions of the crown of the last lower molar are .77 by .62 inch. In another fully adult individual, bearing all the characteristics of the species, the measurements of this tooth are .75 by .57 inch. The dimensions of the first superior molar in this specimen are the same as those in the fossil specimen under consideration. It will be observed, therefore, that *Ursus amplidens* is intermediate in size between these two well defined specimens of *Ursus ferox*.

There is no character left by which we can distinguish this species, but the slight exaggeration of the anterior basal lobe of the superior molar, which is so very variable as to be almost worthless for this purpose.

*Ursus amplidens* is, therefore, but a variety at best, if not identical with the smaller varieties of *Ursus ferox*.

---

NOVEMBER 28.

The President, Dr. LEIDY, in the chair.

Forty-one persons present.

The deaths of Dr. J. F. Reinhardt and Dr. F. H. Troschel, correspondents, were announced.

*Note on Zeolites from Delaware County.*—Prof. GEO. A. KÖNIG communicated an observation on specimens received through Mr. A. Deshong from the Leiperville quarries. The whole of the material is from one crevice. One piece shows the association of gray quartz, yellowish grossularite, a chloritic mica, beautiful rose-red zoisite, and small crystals of heulandite, previously described by the speaker (Proceedings 1878, p. 84).

A second piece of biotite mica-schist shows in several druses seemingly botryoidal masses, which under the lens show coxcomb aggregations and are stilbite. Alongside one observes grains of zoisite surrounded by deep green, waxy Leidyite, the surface of which is generally covered with a very thin film of an undetermined greenish gray substance.

The remaining specimens show upon the same rock largely rhombohedral crystals of chabazite; some vitreous, but mostly covered by green, waxy Leidyite. This substance supports many